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EXAMINER	
LIN, JASON K	

ART UNIT	PAPER NUMBER
2623	

NOTIFICATION DATE	DELIVERY MODE
03/21/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/773,166	DOI ET AL.	
	Examiner	Art Unit	
	JASON K. LIN	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5 and 8-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to amendment of application No. 10/773,166 filed on 02/12/2008. **Claim 7** is cancelled and **Claims 5 and 8-18** are pending and have been examined.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/12/2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to **claims 5 and 8-18** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 5 and 12-17** rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) in view of Merjanian (US 5,92,642), in view Alexander (US 6,177,931), and further in view of Fortenberry et al. (US 6,101,485).

Consider **claim 5**, Rauch teaches an apparatus for providing additional services for televisual programs to be distributed by broadcasting, comprising:

an electronic program guide (EPG) ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) generation unit (graphics display generator 157, generates graphics) configured to generate an EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a

television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

an update unit configured to update the EPG on the basis of a similarity between televisual programs selected by the users (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time. The only difference here is that the information can be taken whenever it's needed, but it still falls within the same embodiment where "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57).

Rauch does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller;

wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Merjanian teaches, a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that "the platen 30 is exposed so that finger print data may be acquired from the operator's digit 32").

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Rauch's system to include a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller, as taught by Merjanian, for the advantage of allowing for authentication of various users, providing users with their personal preferences on what they prefer to view (Merjanian - col 3: lines 27-53), making the program selection process easier and less cumbersome for the user.

Rauch and Merjanian do not explicitly teach wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Alexander teaches, means for collecting contents of transactions for goods purchased and for adding televisual

programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program (Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on comparison analysis it can determine the subjects, theme, movie, episode, etc that the viewer would be interested in).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch and Merjanian to include means for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program, as taught by Alexander, for the advantage of identifying a greater variety of programs that will suit the needs of the viewers and presenting them with pertinent programming information.

Rauch, Merjanian, and Alexander do not explicitly teach the transactions for goods purchase are through virtual shops on the Internet.

In an analogous art Fortenberry teaches, collecting contents of transactions for goods purchased through virtual shops on the Internet (Col 4: lines 13-25, Col 2: lines 8-10 teaches shopper data may be acquired during visits to an e-commerce site where shopper behavior may be logged such as actions taken, items purchased, etc. This information is acquired and analyzed in order tailor/target items to a particular user)

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, and Alexander to include purchases in the form of purchasing through virtual shops on the Internet, as taught by Fortenberry, for the advantage of enabling viewers to conveniently view and buy items of interest without having to leave the comforts of home.

Consider **claim 12**, Rauch et al. teaches an apparatus for providing additional services for televisual programs to be distributed by broadcasting, comprising:

an electronic program guide (EPG) generation unit configured to generate an EPG in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an “adaptively learned order” arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the

frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the categories (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

an update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) configured to update the EPG on the basis of a similarity between a taste of a user and a televisual program (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences), which is determined from contents of transactions of the user by communication

(The process described in col 11: lines 29-37 and col 12: lines 7-20 pertain to an exchange of information done by user selection which is the same as the claimed transactions of the user by communication).

Rauch does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller;

wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Merjanian teaches, a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that “the platen 30 is exposed so that finger print data may be acquired from the operator’s digit 32”).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Rauch’s system to include a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller, as taught by Merjanian, for the advantage of allowing for authentication of various users, providing users with their

personal preferences on what they prefer to view (Merjanian - col 3: lines 27-53), making the program selection process easier and less cumbersome for the user.

Rauch and Merjanian do not explicitly teach wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Alexander teaches, means for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program (Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on

comparison analysis it can determine the subjects, theme, movie, episode, etc that the viewer would be interested in).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch and Merjanian to include means for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program, as taught by Alexander, for the advantage of identifying a greater variety of programs that will suit the needs of the viewers and presenting them with pertinent programming information.

Rauch, Merjanian, and Alexander do not explicitly teach the transactions for goods purchase are through virtual shops on the Internet.

In an analogous art Fortenberry teaches, collecting contents of transactions for goods purchased through virtual shops on the Internet (Col 4: lines 13-25, Col 2: lines 8-10 teaches shopper data may be acquired during visits to an e-commerce site where shopper behavior may be logged such as actions taken, items purchased, etc. This information is acquired and analyzed in order tailor/target items to a particular user)

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, and Alexander to include purchases in the form of purchasing through virtual shops on the

Internet, as taught by Fortenberry, for the advantage of enabling viewers to conveniently view and buy items of interest without having to leave the comforts of home.

Consider **claim 13**, Rauch et al. teaches a system for providing additional services, comprising:

an apparatus for providing additional services, including:

electronic program guide (EPG) generation unit configured to generate an EPG in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is

the same as the claimed classified categories explained previously above); and

an update unit (col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time) configured to update the EPG on the basis of a similarity between televisual programs selected by the users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences); and

an audiovisual apparatus for presenting televisual programs (Fig. 1), including:

a reception unit (tuner 115, computer 100) configured to receive the EPG provided from said apparatus for providing additional services, together with contents information of the televisual program or independently of the contents information (The claimed contents information is shown "in an adaptively learned ordered schedule layout at the same time as both the textual and graphic description as stated in col 2: lines 35-46, wherein "adaptively ordered" also stated in col 12: lines 25-

29 is the same as the claimed classified categories explained previously above);

a generation unit (graphics display generator 157) configured to generate a program selection window (The claimed program selection window is disclosed in col 4: lines 54-61, col 5: lines 13-18. The "selection program" is displayed by the picture-in-graphics processor 155) for causing a user to select a desired program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above) on the basis of the EPG ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) received by said reception unit (tuner 115, computer 100); and

a selection unit configured to cause the user to select a televisual program to be reproduced or recorded from the program selection window (The claimed program selection window is displayed by the television 130, the claimed selection unit is disclosed as a input device in conjunction with the program selection window, and the program can be reproduced [displayed] and recorded as stated in col 5: lines 11-18).

Rauch does not explicitly teach a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller;

wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Merjanian teaches, a personal authentication unit (Fig. 7) arranged at a portion where a finger of a viewer comes into contact with a remote controller (col 8: lines 8-22 discloses that “the platen 30 is exposed so that finger print data may be acquired from the operator’s digit 32”).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Rauch’s system to include a personal authentication unit arranged at a portion where a finger of a viewer comes into contact with a remote controller, as taught by Merjanian, for the advantage of allowing for authentication of various users, providing users with their personal preferences on what they prefer to view (Merjanian - col 3: lines 27-53), making the program selection process easier and less cumbersome for the user.

Rauch and Merjanian do not explicitly teach wherein said update unit includes:

means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art, Alexander teaches means for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program (Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on comparison analysis it can determine the subjects, theme, movie, episode, etc that the viewer would be interested in).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch and Merjanian to include means

for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program, as taught by Alexander, for the advantage of identifying a greater variety of programs that will suit the needs of the viewers and presenting them with pertinent programming information.

Rauch, Merjanian, and Alexander do not explicitly teach the transactions for goods purchase are through virtual shops on the Internet.

In an analogous art Fortenberry teaches, collecting contents of transactions for goods purchased through virtual shops on the Internet (Col 4: lines 13-25, Col 2: lines 8-10 teaches shopper data may be acquired during visits to an e-commerce site where shopper behavior may be logged such as actions taken, items purchased, etc. This information is acquired and analyzed in order tailor/target items to a particular user)

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, and Alexander to include purchases in the form of purchasing through virtual shops on the Internet, as taught by Fortenberry, for the advantage of enabling viewers to conveniently view and buy items of interest without having to leave the comforts of home.

Consider **claim 16**, an article of manufacture, comprising:

a computer usable medium having computer readable program code (memory 150) means embodied therein for causing a user to select a provided televisual program in accordance with a taste of the user (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively ordered" is categories), the computer readable program code means in said article of manufacture comprising:

computer readable program code means for causing a computer to receive an electronic program guide (EPG) ("Program information" referred to in Rauch is the same as the claimed EPG because it contains program name, time of broadcast, channel indicator and description of each television program as stated in col 5: lines 6-8) in which televisual programs to be provided are classified into classified categories based on viewer features according to tastes of users (The information is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-29 is the same as the claimed classified categories. It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to know

viewer preferences) to allow selection of a televisual program in accordance with the classified categories based on viewer features (As stated in col 2: lines 35-46, "the user can select a television program perceptively by viewing the adaptively ordered schedule layout" via a selection program col 5: lines 14-17, wherein "adaptively learned order" also stated in col 12: lines 25-29 is the same as the claimed classified categories explained previously above); and

computer readable program code means for causing the computer to update the EPG on the basis of a similarity between televisual programs selected by the users (Col 9: lines 46-49 discloses the schedule information resides at the cable source and is obtained as needed by the computer 100 in real time. The only difference here is that the information can be taken whenever it's needed, but it still falls within the same embodiment where "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57);

Rauch does not explicitly teach computer readable program code means or causing a computer to perform personal authentication of a user;

wherein said computer readable program code means for causing the computer to update the EPG includes:

computer readable program code means for collecting contents of transactions for goods purchased through virtual shops on the Internet

and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art Merjanian teaches, a set top box. Merjanian also teaches computer readable program code means or causing a computer to perform personal authentication of a user (col 9: lines 16-18 discloses the use of different items possible to perform matching to identify the user. Part of the authentication is programmed in software into the set-top box col 11: lines 26-28. col 11: lines 30-43 describe the authentication process used to authenticate the user).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify Rauch's system to include causing a computer to perform personal authentication of a user, as taught by Merjanian, for the advantage of allowing for authentication of various users, providing users with their personal preferences on what they prefer to view (Merjanian - col 3: lines 27-53), making the program selection process easier and less cumbersome for the user.

Rauch and Merjanian do not explicitly teach wherein said computer readable program code means for causing the computer to update the EPG includes:

computer readable program code means for collecting contents of transactions for goods purchased through virtual shops on the Internet and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program.

In an analogous art, Alexander teaches means for collecting contents of transactions for goods purchased and for adding televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program (Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on comparison analysis it can determine the subjects, theme, movie, episode, etc that the viewer would be interested in).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch and Merjanian to include means for collecting contents of transactions for goods purchased and for adding

televisual programs from other than a classified category, based on viewer features selected by another user having a taste similar to that of a user, to the EPG to be commonly provided to all the users, on the basis of the similarity between the tastes of the user and a televisual program, as taught by Alexander, for the advantage of identifying a greater variety of programs that will suit the needs of the viewers and presenting them with pertinent programming information.

Rauch, Merjanian, and Alexander do not explicitly teach the transactions for goods purchase are through virtual shops on the Internet.

In an analogous art Fortenberry teaches, collecting contents of transactions for goods purchased through virtual shops on the Internet (Col 4: lines 13-25, Col 2: lines 8-10 teaches shopper data may be acquired during visits to an e-commerce site where shopper behavior may be logged such as actions taken, items purchased, etc. This information is acquired and analyzed in order tailor/target items to a particular user)

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, and Alexander to include purchases in the form of purchasing through virtual shops on the Internet, as taught by Fortenberry, for the advantage of enabling viewers to conveniently view and buy items of interest without having to leave the comforts of home.

Consider **claim 14**, Rauch et al. teaches said apparatus for providing additional services comprises:

similar-program calculation means for collecting information associated with selected programs (Rauch - The schedule layout is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63 meaning that previous information was collected from the "previous selections." Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that monitoring" as stated in col 6: lines 52-57 allowing the device to collect information on viewer preferences) from said audiovisual apparatus (Rauch - Fig. 1) for presenting televisual programs to calculate similar programs, and said audiovisual apparatus for presenting televisual programs (Rauch - Fig. 1) comprises:

recommended program presentation (Rauch - The program presentation [schedule layout] is arranged in an "adaptively learned order" arranging topics such as show, actor, director, etc as stated in col 12: lines 25-32) means for presenting the similar programs calculated by said similar program calculation means as recommended programs for the user (Rauch - It is according to tastes of users because it is arranged according to the frequency of previous selections as stated in col 2: lines 28-31 and col 3: lines 41-63. Furthermore "selection patterns can be monitored… channel entries rearranged based on the results of that

monitoring" as stated in col 6: lines 52-57 allowing the device to know viewer preferences).

Consider **claim 15**, Alexander further teaches a means for collecting information of goods purchased on a network (purchase history information are gathered and analyzed as disclosed in col 29: lines 50-55 and col 30: lines 17-25) and calculating the similarity (User profiles are compared to profiles of others to determine if the user might be interested in a particular "subject, product, theme, movie, episode, etc" col 30: lines 38-44) by using the information as a material for judging the taste of the user together with a keyword representing a feature of a televisual program (col 30: lines 17-44 discloses analyzing viewer buying history and determining the programs to present to the user), which is obtained from event information (EIT) attached to contents of the televisual program (profile gathers information from the internet col 30: lines 1-16 and is used to generate an EPG col 30: lines 45-58. The EIT in this case is the related information that can be accessed via the EPG or World Wide Web pertaining to the telecast and also related to the user's preferences).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, Alexander, and Fortenberry, to include a means for collecting information of goods purchased on a network and calculating the similarity by using the information as a material for judging the taste of the user together with a

keyword representing a feature of a televisual program, which is obtained from event information (EIT) attached to contents of the televisual program, as further taught by Alexander, for the advantage of presenting products and programs that are of related to the interests of the viewer, keeping his attention and helping to better satisfy their viewing desires.

Consider **claim 17,** Rauch, Merjanian, Alexander, and Fortenberry teaches a window generating unit configured to generate a program guide window that includes only a list of program categories such that the viewer can select one of the listed program categories prior to selecting a program within the select program category (Rauch – Col 11: lines 53-67, Col 12: lines 7-11).

Consider **claim 18,** Rauch, Merjanian, Alexander, and Fortenberry teaches wherein said means for adding televisual program adds programs based on the contents of the transactions for the goods purchased through the virtual shops on the Internet (Alexander - Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on comparison analysis it can determine the subjects, theme, movie, episode,

etc that the viewer would be interested in. Fortenberry - Col 4: lines 13-25, Col 2: lines 8-10 teaches shopper data may be acquired during visits to an e-commerce site where shopper behavior may be logged such as actions taken, items purchased, etc. This information is acquired and analyzed in order tailor/target items to a particular user).

6. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) as applied to **claim 5** above, in view of Merjanian (US 5,92,642), in view of Alexander (US 6,177,931), in view of Fortenberry et al. (US 6,101,485), and further in view of Wilkins (US 5,446,919).

Consider **claim 8**, Rauch, Merjanian, Alexander, and Fortenberry teaches said update unit (Rauch - col 9: lines 46-49) comprises:

collecting contents of transactions for goods purchases, and for selecting the televisual program on the basis of the similarity between the taste of the user and the televisual program, and for adding televisual programs other than the classified category based on viewer features to the classified category based on viewer features in the EPG to be commonly provided to all users (Alexander - Col 29: lines 31-55 teaches updating based on viewing history. Col 30: lines 21-24, 34-35, teaches updating based on purchase history. Col 30: lines 45-58 teaches generating an EPG based on viewer profile. Col 30: lines 38-44 teaches similar viewer profiles from other users {also includes other users purchases and viewing selections} are compared and based on

comparison analysis it can determine the subjects, theme, movie, episode, etc that the viewer would be interested in).

Rauch, Merjanian, Alexander, and Fortenberry do not explicitly teach the transactions for goods purchase are by mail order.

In an analogous art Wilkins teaches collecting contents of transactions for goods purchases by mail orders (col 4: lines 11-28 discloses that "mail-order purchase records" can be compiled to be used as information. This information can be used to form a "master database" disclosed in col 8: lines 15-29 where the mail-order information contents can be collected and stored).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, Alexander, and Fortenberry, to include purchases in the form of mail order, as taught by Wilkins, for the advantage of enabling viewers including but not limited to those that are reluctant to submit information electronically and/or more familiar with the mailing system to submit purchase information via mail after seeing an infomercial on TV.

7. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) as applied to **claim 5** above, in view of Merjanian (US 5,92,642), in view of Alexander (US 6,177,931), in view of Fortenberry et al. (US 6,101,485), and further in view of Borseth (US 6,340,997).

Consider **claim 9**, Rauch, Merjanian, Alexander, and Fortenberry teaches said update unit (Rauch - col 9: lines 46-49), but does not explicitly teach means for analyzing a closed caption to extract a keyword representing a feature of contents of a televisual program, thereby calculating the similarity.

In an analogous art Borseth teaches means for analyzing a closed caption to extract a keyword representing a feature of contents of a televisual program, thereby calculating the similarity (col 9: lines 40-51 disclose that the VBI data can include closed captioning information that can be used to create or update an electronic program guide. An EPG contains information about the content like time, channel, genre, etc pertaining to the televisual programs. Since an EPG can be created by the closed caption data keyword(s) can be extracted from the closed caption data).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, Alexander, Fortenberry, to include updating the EPG based on closed captioning text, as taught by Borseth, for the advantage of providing program data to the deaf community for updating their EPG.

8. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) as applied to **claim 5** above, in view of Merjanian

(US 5,92,642), in view of Alexander (US 6,177,931), in view of Fortenberry et al. (US 6,101,485), and further in view of Schindler (US 5,995,155).

Consider **claim 10**, Rauch, Merjanian, Alexander, and Fortenberry teaches said update unit (Rauch - col 9: lines 46-49), but does not explicitly teach means for recognizing audio data in a transmission signal of a televisual program, converting the audio data into a text, and extracting a keyword representing a feature of contents of the televisual program from the text, thereby calculating the similarity.

In an analogous art Schindler teaches means for recognizing audio data in a transmission signal of a televisual program ("recognizes at least a few words from current television programming" col 13: lines 20-25), converting the audio data into a text ("speech recognition circuitry is used to convert speech to text…" col 4: line 35), and extracting a keyword representing a feature of contents of the televisual program from the text, thereby calculating the similarity (col 13: lines 12-20 describes an auto surf function that can extract keyword[s] from the closed captioning of a televisual program alerting the user to desired programming. Where closed captioning information is unavailable speech to text recognition is used in its place to get the textual information as stated in col 13: lines 20-25).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanian, Alexander, and Fortenberry to update the EPG based on speech to text recognition

circuitry, as taught by Schindler, for the advantage of providing program data to the deaf community for updating their EPG.

9. **Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Rauch et al. (US 5,731,844) as applied to **claim 5** above, in view of Merjanian (US 5,92,642), in view of Alexander (US 6,177,931), in view of Fortenberry et al. (US 6,101,485), and further in view of Lawler (US 5,758,259).

Consider **claim 11**, Rauch, Merjanian, Alexander, and Fortenberry teaches said update unit (Rauch - col 9: lines 46-49) comprises:

Rauch, Merjanian, Alexander, and Fortenberry do not explicitly teach a means for analyzing video data, calculating an appearance time of each performer, and accumulating a numerical value corresponding to the appearance time of the performer in place of a keyword representing a feature of contents of a televisual program to calculate a weight coefficient of the performer, thereby calculating the similarity.

In an analogous art Lawler teaches a means for analyzing video data, calculating an appearance time of each performer, and accumulating a numerical value corresponding to the appearance time of the performer in place of a keyword representing a feature of contents of a televisual program to calculate a weight coefficient of the performer, thereby calculating the similarity (Lawler discloses the preference database was created by previous programs selected by the viewer and a numerical value is calculated for each name, genre, subgenre, and team, and the

matching programs are generated and sent to the user col 7: line 62 – col 8: line 34).

Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system of Rauch, Merjanina, Alexander, and Fortenberry to include, the appearance time of a performer calculated and making a numerical value and calculating the similarity using the weight of the number, as taught by Lawler, in order to present programs with performers that would be tailored to the viewer's preferences, that would better grab and retain the viewer's interest.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON K. LIN whose telephone number is (571)270-1446. The examiner can normally be reached on Mon-Fri, 9:00AM-6:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian T. Pendleton can be reached on (571)272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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03/11/2008
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